

REMARKS

Claims 1-6, 16-17 and 21 are pending in this application. Claims 1, 3, 17 and 21 are amended herein. Claims 22-28 are canceled herein. Claims 7-15 and 18-20 were previously canceled. Applicants respectfully request entry of the amendments herein after final rejection in order to place the claims in a condition for allowance or to place the claims in a better form for appeal. Applicants respectfully request reconsideration of the claims in view of the following remarks.

The abstract is amended herein to correct a typographical error. Entry is requested.

The title is amended herein to make it correspond to the scope of the pending claims. Entry is requested.

The Examiner indicated that claims 16-17 and 21-28 are drawn to non-elected inventions from the previous non-election with traverse filed by Applicants. With respect to claims 22-28, they are canceled by the amendments herein as drawn to a non-elected invention, Applicants reserve the right to file these or similar claims in a divisional application. With respect to claims 16-17 and 21, Applicants respectfully disagree with the Examiner. The election filed by Applicants elected claims drawn to Species I, as indicated in the Examiner's restriction requirement. The Examiner made a restriction and Species I was indicated as subject matter illustrated in Figure 2.

Claims 16-17 and 21 are to embodiments clearly shown in Figure 2 and described in the accompanying text at paragraph 21. The capacitor depicted in Figure 2 includes an adhesion layer from a group including  $\text{IrO}_2$ .  $\text{IrO}_2$  is (as further described in the application at paragraph 18, for example) a conductive layer as recited in claim 16.  $\text{IrO}_2$  is specifically recited as the

conductive layer in claim 17, this layer is shown in Figure 2 as described. Finally, claim 21 recites the use of Pt as the bottom electrode, as shown in Figure 2 and described at paragraph 21.

These dependent claims are clearly within Species I as elected by Applicants. The claims were added subsequent to the election but claim subject matter depicted in Figure 2, the basis for the restriction made by the Examiner, and Applicants submit these claims are not in fact drawn to a non-elected invention but are in fact directly reciting subject matter of Species I, the elected species.

Claims 1 and 17 were amended herein to correct typographical defects remaining from a prior amendment. Entry of these amendments is requested.

Claims 1-6 were rejected under 35 U.S.C. §103 as being obvious over the combination of U.S. Patent No. 6,365,420 to Ashida and U.S. Patent No. 6,800,937 to Marsh. This rejection is hereby respectfully traversed.

The Examiner recited Ashida as teaching a high dielectric capacitor structure and an adhesion layer over an SiO<sub>2</sub> layer and a noble bottom metal electrode is deposited over the adhesion layer. However, the reference, as the Examiner admits, does not show, teach or suggest the use of an adhesion layer selected from the group of Si and IrO<sub>2</sub>, as recited in claim 1.

Marsh is then cited by the Examiner as teaching an adhesion layer of IrO<sub>2</sub>. Applicants respectfully submit that the reference does not teach an adhesion layer of IrO<sub>2</sub> in physical contact with the SiO<sub>2</sub> substrate as recited in claim 1.

The Examiner refers to Marsh at column 3 as teaching the required elements. The reference teaches an adhesion layer comprising ruthenium silicon oxide compounds as the adhesion layer for all embodiments. The reference then suggests providing a conductive metal oxide layer formed over the adhesion layer, the conductive layer may include IrO<sub>2</sub>. The reference

2004P51100US/  
INTECH3.0-050DIV

Page 7 of 9

Amendment After Final

never teaches forming a conductive layer as the adhesion layer, in contact with the substrate nor does it ever teach forming an IrO<sub>2</sub> layer in contact with the SiO<sub>2</sub> layer. Indeed the reference teaches away from this arrangement, as the conductive IrO<sub>2</sub> layer is always formed as an additional layer over the adhesion layer, see for example, Col. 3 at lines 46-52 where the IrO<sub>2</sub> layer is one of several conductive layers taught as formed over the ruthenium containing adhesion layer.

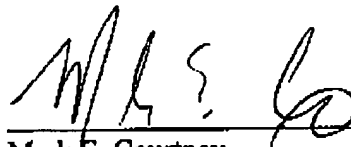
Accordingly, Applicants believe that claim 1 is allowable over the references taken singly or in the proposed combination. Reconsideration and allowance are requested.

Claims 2-6, 16-17 and 21 depend from and recite additional limiting steps on the method of independent claim 1. As each of these dependent claims includes the limitations of claim 1, each is also believed to be allowable over the references. Reconsideration and allowance are hereby respectfully requested.

Applicants have made a diligent effort to place the claims in condition for allowance.

However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Mark E. Courtney, Applicants' attorney, at 972-732-1001 so that such issues may be resolved as expeditiously as possible. No fee is believed due in connection with this filing. However, should one be deemed due, the Commissioner is hereby authorized to charge Deposit Account No. 50-1065.

Respectfully submitted,



Mark E. Courtney  
Attorney for Applicants  
Reg. No. 36,491

February 3, 2006

Date

Slater & Matsil, L.L.P.  
17950 Preston Rd., Suite 1000  
Dallas, Texas 75252-5793  
Tel. 972-732-1001  
Fax: 972-732-9218